5.11 Hazardous Materials

5.11.1 Introduction

This chapter addresses the hazards and hazardous materials issues related to the project site and that have been identified in the surrounding area. A material is considered hazardous if it appears on a list of hazardous materials prepared by a federal, state, or local agency, or if it has characteristics defined as hazardous by such an agency. Factors that influence the health effects of exposure to a hazardous material include the dose to which the person is exposed, the frequency of exposure, the exposure pathway, and individual susceptibility.

5.11.2 Environmental Setting

Existing Conditions

A Phase I Environmental Site Assessment was produced in conformance with the scope and limitations of American Society of Testing and Materials (ASTM) Standard Practice E1527, which specifies the appropriate inquiry requirement for the innocent landowner defense under the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA) (**Appendix K**). The Phase I Environmental Site Assessment included historical records review, a database search, and site reconnaissance.

As a part of the Phase I Assessment, governmental regulatory agency databases as listed in **Table 5.11-1**, were searched for listings up to 1.25 mile from the project site. The database search report provided by *VISTA Information Solutions, Inc.* is attached to the Phase I report. The database search covered the Project site, as well as surrounding lands anywhere from 3/8 mile to 1.25 mile from the site, depending on the database. Included in the VISTA database search report was a list of "unmapped sites", which was reviewed for properties that may be located within the search radius specified for each governmental database.

The Phase I Environmental Site Assessment conducted for the project site did not identify any existing hazardous material releases on or adjacent to the project site. The Assessment concluded that "Based only on the information reviewed, the site reconnaissance and interviews, this assessment has revealed no evidence of recognized environmental conditions in connection with the subject property."

Table 5.11-1 Databases Searched in Site Assessment

Database	Type of Record	Agency
NPL	National Priority List	U.S. EPA
CORRACTS ¹	RCRA ² Corrective Actions	U.S. EPA
SPL	State equivalent priority	STATE
SCL	State equivalent CERCLIS ³ List	STATE
CERCLIS/	Sites currently or formerly under review by US EPA	U.S. EPA
NFRAP ⁴		
TSD	RCRA permitted treatment, storage, disposal facilities	U.S. EPA
LUST	Leaking Underground Storage Tanks	State Regulatory Commission
SWLF	Permitted as solid waste landfills, incinerators or transfer stations	State/ Regional Regulatory Commission
DEED RSTR	Sites with deed restrictions	STATE
CORTESE ⁵	State index of properties with hazardous waste	STATE
TOXIC PITS	Toxic pits cleanup facilities	STATE
WATER WELLS	Federal and State Drinking Water Sources	USGS/ STATE
RCRA Viol	RCRA violations/ enforcement actions	U.S. EPA
TRIS	Toxic Release Inventory Database	U.S. EPA
ERNS	Emergency Response Notification System of Spills	U.S. EPA
GNRTR	RCRA registered small or large generators of hazardous waste	U.S. EPA
SPILLS	State spills list	STATE
UST/AST	Registered underground or aboveground storage tanks	STATE

Source: Vista Report, 2000

CORRACTS:Corrective Action Report System, an EPA database of corrective actions taken at a RCRA Regulated site. (also known as CARS)

²RCRA:Resource Conservation and Recovery Act

³CERCLIS:Comprehensive Environmental Response, Compensation & Liability Information System ⁴NFRAP:No Further Remedial Action Planned (archived CERCLIS sites) ⁵CORTESE:Based on input from 14 state databases

Asbestos

El Dorado County is located in the Sierra foothills. The geology of the Sierra foothills contains an abundance of serpentine rock. Serpentine rock often contains naturally-occurring asbestos. The project site is situated within a north-trending, relatively narrow zone of chaotically intermixed rocks known as the Sierra Foothills Melange Belt. These rocks include what once was an ancient sea floor. Within this belt, especially along the Bear Mountain fault Zone, the metamorphic rocks are intermixed with rocks containing serpentine called serpentinite. Serpentine is a group of common rock-forming minerals that are derived from magnesium-rich silicate minerals in igneous and metamorphic rocks.

Serpentine rock is abundant in the Sierra foothills and has been identified in particular bedrock formations in El Dorado County. The project site is located in an area identified as containing both ultramafic rocks and non-ultramafic rocks on a California Department of Conservation, Division of Mines and Geology map of western El Dorado County (DMG, 1998). Ultramafic rocks are defined as areas containing serpentine rock and related rock types, and non-ultramafic rocks are defined as areas that may contain ultramafic rocks too small to show on the map or not included on the source map (DMB, 1998). Subsurface bedrock in the vicinity of the project site may not be shown on available geologic maps because younger artificial fill and alluvial deposits may cover it. Boulders of serpentinite were observed outcropping on property south of Highway 50. It is therefore uncertain as to the presence or extent of serpentinite bedrock at the project site.

Asbestos minerals, including chrysotile and tremolite, can also occur naturally in serpentine rock, especially that of the Franciscan Formation in the Coast Ranges. Asbestos presents an inhalation hazard because the fibers can enter the lungs and in some cases result in lung cancer, asbestosis and mesothelioma. Levels and types of asbestos minerals vary with the rock and with location: some serpentinite may not contain harmful asbestos while others may contain a high percentage. Asbestos fibers are potentially harmful when they are airborne, therefore, asbestos sources that are friable and pulverized are considered more of a health risk than solid, non-friable sources. For example, a boulder of serpentinite would represent more of a potential asbestos hazard if it were crushed and became friable through mechanical means than if it was undisturbed in an outcrop.

Fire Hazard

Wildland fires are considered a hazard in areas of El Dorado County. The project site is covered with grasses, chamise scrub and oak trees. The project site is located within an area of moderate to high fire hazard (Figure V-4-2, Wildland Fire Hazards, El Dorado County General Plan EA, 1994).

5.11.3 Regulatory Setting

Hazardous wastes are hazardous materials that no longer have practical use, such as substances that have been discarded, discharged, spilled, contaminated, or are being stored prior to proper disposal. Hazardous materials and hazardous wastes are classified according to four properties: toxic, ignitable, corrosive, and reactive (CCR, Title 22, Chapter 11, Article 3). Toxicity, ignitability, corrosivity, and reactivity are defined in the CCR, Title 22, Sections 66261.20-66261.24.

The California Code of Regulations (CCR) defines a hazardous material as a substance that, because of physical or chemical properties, quantity, concentration, or other characteristics, may either (1) cause an increase in mortality or an increase in serious, irreversible, or incapacitating, illness; or (2) pose a substantial present or potential hazard to human health or environment when improperly treated, stored, transported or disposed of, or otherwise managed (CCR, Title 22, Division 4.5, Chapter 10, Article 2, Section 66260.10).

Hazardous materials are subject to numerous laws and regulations at all level of government. Most hazardous materials regulation and enforcement in the El Dorado County is managed by the El Dorado County Environmental Management Department. However, large cases of hazardous materials contamination or violations are handled by the California Regional Water Quality Control Board and the California Department of Toxic Substances Control. It is not at all uncommon for other agencies to become involved when issues of hazardous materials arise such as the El Dorado County Air Pollution Control District in its regulation of asbestos hazard dust and both the federal and state OSHA in the preparation of hazardous materials remediation site safety plans intended to protect the health of construction and contamination remediation workers. In addition, the El Dorado County Fire Protection District is responsible for hazardous materials emergency first response where a hazardous materials incident immanently threatens life or property.

Federal

Federal regulatory agencies include the U.S. EPA, OSHA, the Nuclear Regulatory Commission (NRC), the Department of Transportation (DOT) and the National Institute of Health (NIH). The following represent federal laws and guidelines governing hazardous substances:

- Federal Water Pollution Control Act
- Clean Air Act
- Occupational Safety and Health Act
- Federal Insecticide, Fungicide, and Rodenticide Act

- Comprehensive Environmental Response Compensation and Liability Act
- Guidelines for Carcinogens and Biohazards
- Superfund Amendments and Reauthorization Act Title III
- Resource Conservation and Recovery Act
- Safe Drinking Water Act
- Toxic Substances Control Act

At the federal level, the principal agency regulating the generation, transport and disposal of hazardous substances is the U.S. EPA, under the authority of Resource Conservation and Recovery Act (RCRA). The U.S. EPA regulates hazardous substance sites under the Comprehensive Environmental Response Compensation and Liability Act (CERCLA). Applicable federal regulations are contained primarily in Titles 29, 40, and 49 of the Code of Federal Regulations (CFR).

Hazardous Substances Handling Requirements

The RCRA established a federal hazardous substance "cradle-to-grave" regulatory program that is administered by the U.S. EPA. Under RCRA, the U.S. EPA regulates the generation, transportation, treatment, storage and disposal of hazardous substances. The RCRA was amended in 1984 by the Hazardous and Solid Waste Act (HSWA), which affirmed and extended the "cradle-to-grave" system of regulating hazardous substances. The HSWA specifically prohibits the use of certain techniques for the disposal of some hazardous substances. Under the RCRA, individual states may implement their own hazardous substance management programs as long as they are consistent with, and at least as strict as, RCRA. The U.S. EPA must approve state programs intended to implement the RCRA requirements.

Hazardous Waste Sites

The CERCLA, commonly referred to as Superfund, was enacted on December 11, 1980. The purpose of CERCLA was to provide authorities the ability to respond to uncontrolled releases of hazardous substances from inactive hazardous waste sites that endanger public health and the environment. CERCLA established prohibitions and requirements concerning closed and abandoned hazardous waste sites, provided for liability of persons responsible for releases of hazardous waste at such sites, and established a trust fund to provide for cleanup when no responsible party could be identified. In addition, CERCLA provided for the revision and republishing of the National Contingency Plan (NCP) that provides the guidelines and procedures needed to respond to releases and threatened releases of hazardous substances,

pollutants, or contaminants. The NCP also provides for the National Priorities List, a list of national priorities among releases or threatened releases throughout the United States for the purpose of taking remedial action.

The Superfund Amendments and Reauthorization Act (SARA) amended CERCLA on October 17, 1986. This amendment increased the size of the Hazardous Response Trust Fund, expanded U.S. EPA's response authority, strengthened enforcement activities at Superfund sites; and broadened the application of the law to include federal facilities. In addition, new provisions were added to the law that dealt with emergency planning and community right to know. SARA also required U.S. EPA to revise the Hazard Ranking System to ensure that the HRS accurately assesses the relative degree of risk to human health and the environment posed by sites and facilities subject to review for listing on the NPL.

Hazardous Substances Worker Safety Requirements

The Federal Occupational Safety and Health Administration (Fed/OSHA) is the agency responsible for ensuring worker safety. Fed/OSHA sets federal standards for implementation of training in the work place, exposure limits, and safety procedures in the handling of hazardous substances (as well as other hazards). Fed/OSHA also establishes criteria by which each state can implement its own health and safety program.

Hazardous Materials Transportation

The DOT regulates the interstate transport of hazardous materials and wastes through implementation of the Hazardous Materials Transportation Act. This act specifies driver training requirements, load labeling procedures, and container design and safety specifications. Transporters of hazardous wastes must also meet the requirements of additional statutes such as RCRA.

State

The Cal/EPA and the Office of Emergency Services (OES) of the State of California establish rules governing the use of hazardous substances. The State Water Resources Control Board (SWRCB) has primary responsibility to protect water quality and supply.

The Cal/EPA was created in 1991 to better coordinate state environmental programs, reduce administrative duplication, and address the greatest environmental and health risks. Cal/EPA unifies the state's environmental authority under a single accountable, Cabinet-level agency. The Secretary for Environmental Protection oversees the following agencies: Air Resources Board,

Integrated Waste Management Board, Department of Pesticide Regulation, SWRCB, Department of Toxic Substances Control (DTSC), and OES.

Hazardous Substances Handling Requirements

Within Cal/EPA, the DTSC has primary regulatory responsibility, with delegation of enforcement to local jurisdictions that enter into agreements with the state agency, for the generation, transport and disposal of hazardous substances under the authority of the Hazardous Waste Control Law (HWCL). Regulations implementing the HWCL list approximately 791 hazardous chemicals and 20 to 30 more common substances that may be hazardous; establish criteria for identifying, packaging and labeling hazardous substances; prescribe management of hazardous substances; establish permit requirements for hazardous substances treatment, storage, disposal and transportation; and identify hazardous substances that cannot be deposited in landfills.

Under both the RCRA and the HWCL, the generator of a hazardous substance must complete a manifest that accompanies the waste from the point of generation to the ultimate treatment, storage or disposal location. The manifest describes the waste, its intended destination, and other regulatory information about the waste. Copies must be filed with the DTSC. Generators must also match copies of waste manifests with receipts from the treatment, storage or disposal facility to which it sends waste.

Hazardous Substances Worker Safety Requirements

The California Occupational Safety and Health Administration (Cal/OSHA) assumes primary responsibility for developing and enforcing work place safety regulations within the State. Cal/OSHA standards are more stringent than federal regulations. Cal/OSHA regulations concerning the use of hazardous substances include requirements for safety training, availability of safety equipment, hazardous substances exposure warnings, and emergency action and fire prevention plan preparation. Cal/OSHA enforces the hazard communication program regulations, which include provisions for identifying and labeling hazardous substances, describing the hazards of chemicals, and documenting employee training programs.

Both federal and State laws include special provisions for hazard communication to employees who work with and/or encounter hazardous materials and wastes. The training must include safe methods for handling hazardous substances, an explanation of Material Safety Data Sheets, use of emergency response equipment, implementation of an emergency response plan and use of personal protective equipment.

Groundwater Regulatory Background

Acting through the California Regional Water Quality Control Board (RWQCB), the SWRCB regulates surface and groundwater quality pursuant to the Porter-Cologne Water Quality Act, the federal Clean Water Act, and the Underground Tank Law. Under these laws, RWQCB is authorized to supervise the cleanup of hazardous wastes sites referred to it by local agencies in those situations where water quality may be affected.

Depending on the nature of contamination, the lead agency responsible for the regulation of hazardous materials at the site can be the DTSC, RWQCB, or both. DTSC evaluates contaminated sites to ascertain risks to human health and the environment. Sites can be ranked by DTSC or referred for evaluation by the RWQCB.

The RWQCB is responsible for overseeing the discharge of water (from dewatering during construction activities) to surface waters. Cal/EPA (DTSC) and Cal/OSHA are the agencies that are responsible for overseeing that appropriate measures are taken to protect workers from exposure to potential groundwater contaminants.

Hazardous Materials Transport

California law requires that Hazardous Waste (as defined in California Health and Safety Code Division 20, Chapter 6.5) be transported by a California registered hazardous waste transporter that meets specific registration requirements. The requirements include possession of a valid Hazardous Waste Transporter Registration, proof of public liability insurance which includes coverage for environmental restoration, and compliance with California Vehicle Code registration regulations required for vehicle and driver licensing. A complete list of requirements can be found in Title 22 CCR, Chapter 13.

State agencies with primary responsibility for enforcing federal and state regulations and responding to hazardous materials transportation emergencies are the California Highway Patrol (CHP) and the California Department of Transportation (Caltrans). Together, these agencies determine container types used and license hazardous waste haulers for hazardous waste transportation on public roads.

Local

The Unified Hazardous Waste and Hazardous Management Regulatory Program (SB 1082, 1993) is a state and local effort to consolidate, coordinate, and make consistent existing programs regulating hazardous waste and hazardous materials management. Cal/EPA adopted implementing regulations for the Unified Program (CCR, Title 27, Division 1, Subdivision 4,

Chapter 1) in January 1996. The Unified Program is implemented at the local level by Certified Unified Program Agencies (CUPAs).

The El Dorado County Environmental Management Department (EDCEMD) is the CUPA for cities and unincorporated areas within El Dorado County. Through their Solid Waste & Hazardous Materials Division, the EDCEMD regulates the use, storage and disposal of hazardous materials by issuing permits, inspecting facilities, and investigating complaints. The EDCEMD issues permits for installation and removal of underground storage tanks. The EDCEMD inspects businesses for compliance with the Hazardous Waste Control Act. The EDCEMD also requires that businesses who handle hazardous materials and hazardous wastes to submit a Hazardous Materials Plan (HMP). The HMP includes an inventory of hazardous materials and hazardous wastes, as well as an emergency response to incidents involving those hazardous materials and wastes.

Under a contract with the SWRCB, the EDCEMD conducts the Local Oversight Program to oversee the abatement and cleanup of releases of hazardous substances from underground storage tanks in El Dorado County that do not involve chemical releases to water. The RWQCB is the lead agency for chemical releases to water throughout the County.

Hazardous Waste Management Plan

Assembly Bill 2948 (Tanner, 1986) established procedures for the preparation of a County Hazardous Waste Management Plan (HWMP). The HWMP is intended to serve as the primary planning document for hazardous waste management within a County, and contains goals, policies and recommended programs for the management, recycling and disposal of hazardous wastes. The HWMP principally governs the coordination and planning of hazardous waste disposal capacity between the County and state. The California DHS must give its approval to the plan before the document becomes effective. The El Dorado County HWMP serves as the implementation program for management hazardous waste in order to protect the health, safety, and property of residents.

Emergency Response

California has developed an Emergency Response Plan to coordinate emergency services provided by federal, state, and local government and private agencies. Response to hazardous materials incidents is one part of this plan. The plan is administered by the state Office of Emergency Services (OES), which coordinates the responses of other agencies including Cal/EPA, the California Highway Patrol, California Department of Fish and Game (CDFG), the

Regional Water Quality Control Board (RWQCB), the County Environmental Management Department, and the Fire Department.

The EDCEMD staff responds to hazardous material spills and releases. The Solid Waste & Hazardous Materials Division of the EDCEMD is responsible for after hours on-call support for hazardous material emergencies. The El Dorado County Fire Protection District is also qualified as first response for hazardous materials releases.

California Department Of Transportation (Caltrans)

Construction Specifications

The following is hazardous materials information and requirements as specified by Caltrans for their project development process. These requirements would also apply to the project alternatives. The Caltrans Environmental Handbook (Volume 1, 1995) notes that it is the policy of Caltrans that generally, every project which includes the purchase of new right of way, excavation, and/or structure demolition or modification will require at least an Initial Site Assessment (ISA) to determine if there is any known or potential hazardous waste within the project limits. The Caltrans Environmental Office coordinates this activity and determines the responsibility for completing the ISA.

Chapter 18 (Hazardous Waste) of the Caltrans Project Development Procedures Manual contains policies regarding hazardous waste and the procedures to be followed in transportation related projects to ensure that hazardous waste identification and cleanup is addressed.

El Dorado County General Plans, Policies, And Ordinances

Hazardous Materials

The El Dorado County General Plan includes the following specific goals and policies relative to hazardous materials that are applicable to the Proposed Project and alternatives:

Goal 6.6: Management of Hazardous Materials

Recognize and reduce the threats to public health and the environment posed by the use, storage, manufacture, transport, release and disposal of hazardous materials.

Objective 6.6.1: Regulation of Hazardous Materials

Regulate the use, storage, manufacture, transport and disposal of hazardous materials in accordance with State and Federal regulations.

Policy 6.6.1.1

The Hazardous Waste Management Plan shall serve as the implementation program for management of hazardous waste in order to protect the health, safety, property of residents and visitors, and to minimize environmental degradation while maintaining economic viability.

Policy 6.6.1.2

Prior to the approval of any subdivision of land or issuing of a building permit, it shall be determined whether the subdivision or parcel is located on a contaminated site included in a list on file with the Environmental Management Department as provided by the State of California. If contamination is found to exist, it shall be corrected prior to issuance of a new land use entitlement or building permit.

El Dorado County also has an ordinance (Chapter 8.38), in place regarding hazardous materials which includes requirements for hazardous materials management, hazardous materials incident response, hazardous materials inspections, and permit requirements.

Asbestos

The U.S. EPA has declared asbestos to be a hazardous air pollutant under the CAA and has issued a National Emissions Standard for Hazardous Air Pollutants (NESHAP) that regulates the demolition and renovation of facilities containing asbestos. The NESHAP also imposes additional restrictions on asbestos waste disposal. In California, most of the State's air districts are delegated by U.S. EPA to implement the federal NESHAP requirements. The El Dorado County General Plan does not have any policies specific to asbestos. However, El Dorado County has an ordinance (Chapter 8.4.4) relative to protection from asbestos dust, which requires preparation of an Asbestos Hazard Dust Mitigation Plan prior to construction activities.

Fire Hazard

The El Dorado County General Plan includes the following specific goals and policies relative to fire safety that are applicable to the Proposed Project and alternatives:

Goal 6.2: Fire Hazards

Minimize fire hazards in both wildland and developed areas.

Objective 6.2.2: Limitations to Development

Regulate development in areas of high and very high fire hazard as designated by the California Department of Forestry and Fire Prevention Fire Hazard Severity Zone Maps.

Policy 6.2.2.1

Fire Hazard Severity Zone Maps shall be consulted in the review of all projects so that standards and mitigation measures appropriate to each hazard classification can be applied. Land use densities and intensities shall be determined by mitigation measures in areas designated as high or very high fire hazard.

5.11.4 Impacts And Mitigation Measures

Significance Criteria

A project would generally be considered to have a significant adverse environmental impact if it would create a potential public health hazard; involve the use, production, or disposal of materials that pose a hazard to people, animal or plant populations in the area affected; or if it would interfere with emergency response plans or emergency evacuation plans. For the purposes of this EIR/EA, the following significance criteria are used:

- Create a significant hazard to the public or the environment through the routine transport, use, or disposal of hazardous materials;
- Create a significant hazard to the public or the environment through reasonably foreseeable upset and accident conditions involving the release of hazardous materials into the environment;
- Be located on a site which is included on a list of hazardous materials sites compile pursuant to Government Code Section 65962.5 and, as a result, would create a significant hazard to the public or the environment;
- Impair implementation of or physically interfere with an adopted emergency response plan or emergency evacuation plan;
- Emit hazardous emissions or handle hazardous or acutely hazardous materials, substances or waste within one-quarter mile of an existing or proposed school;
- Expose people or structures to a significant risk of loss, injury or death involving wildland fires, including where wildlands are adjacent to urbanized areas or where residences are intermixed with wildlands.

Methodology

Potential hazardous materials and public health impacts (primarily construction-related exposure) were evaluated. The project site and alternatives were evaluated for consistency with adopted plans and policies, and ordinances, as well as compliance with federal, state and local regulations relative to hazardous materials, asbestos and fire hazards.

Impact/ Mitigation

Impact 5.11-1 Exposure of Individuals to Contaminated Soil and/or Groundwater

AA No development will occur as a result of the No Project/Action Alternative. *No impact* will result under the No Project/Action Alternative.

AB, AC The Phase I Environmental Site Assessment completed for the project site did not identify any obvious signs of hazardous material contamination on the project site or adjacent properties. As a part of the Phase I Site Assessment federal, state, and regional governmental agency database searches were made for records of known sites of hazardous materials generation, storage or contamination. The database searches included the CORTESE database, which is the list of hazardous materials sites compiled pursuant to Government Code Section 65962.5, as required by CEQA. The project site was not listed on any of the databases that were searched. However, the potential does exist for previously unidentified soil and/or groundwater contamination to be encountered during project site preparation and construction activities. Encountering contaminated soil and groundwater without taking proper precautions could result in the exposure of construction workers and consequently result in associated significant adverse health effects. Therefore, in the event contaminated soil and/or groundwater is encountered during construction of the Flyover Interchange Design Alternative or the Diamond Interchange Alternative, proper precautions should be taken to minimize impacts to human health and the environment.

Mitigation 5.11-1 Exposure of Individuals to Contaminated Soil and/or Groundwater

The following mitigation will assure that the proposed project will result is a *less than significant impact*.

(A) If contaminated soil and/or groundwater is encountered or suspected contamination is encountered during project construction, work shall be halted in the area, and the type and extent of the contamination shall be identified. A qualified professional, in consultation with regulatory agencies (RWQCB, DTSC, and/or EDCEMD) shall then develop an appropriate method to remediate the contamination. If necessary, a remediation plan shall be implemented in conjunction with continued project construction.

Impact 5.11-2 Risk of Accidental Release of Hazardous Materials

AA No development will occur as a result of the No Project/Action Alternative. *No impact* will result under the No Project/Action Alternative.

AB, AC During grading and construction activities it is anticipated that limited quantities of miscellaneous hazardous substances, such as gasoline, diesel fuel, hydraulic fluid, solvents, oils, paints, etc. would be brought onto the site. Temporary bulk above-ground storage tanks, 55-gallon drums, sheds/trailers would likely be used by various contractors for fueling and maintenance purposes. As with any liquid and solid, during handling and transfer from one container to another, the potential for an accidental release exists. Depending on the relative hazard of the material, if a spill were to occur of significant quantity, the accidental release could pose both a hazard to construction employees as well as the environment. Therefore, proper precautions should be taken to minimize risks to human health or the environment during construction of the Flyover Interchange Design Alternative or the Diamond Interchange Design Alternative.

Mitigation 5.11-2 Risk of Accidental Release of Hazardous Materials

The following mitigation will assure that the proposed project will result is a *less than significant impact*.

(A) The project applicant shall ensure, through the enforcement of contractual obligations, that all contractors transport, store, and handle construction related hazardous materials in a manner consistent with relevant regulations and guidelines, including those recommended and enforced by the U.S. Department of Transportation, RWQCB, EDCEMD, and the El Dorado County Fire Protection District. The project applicant shall also ensure that all contractors immediately control the source of any leak and immediately contain any spill utilizing appropriate spill containment and countermeasures. If required by any regulatory agency, contaminated media shall be collected and disposed of at an off-site facility approved to accept such media. In addition, all precautions required by the RWQCB issued NPDES construction activity storm water permits will be taken to ensure that no hazardous materials enter any storm drains or nearby waterways.

Impact 5.11-3 Exposure of Individuals to Asbestos Containing Dust

AA No development will occur as a result of the No Project/Action Alternative. *No impact* will result under the No Project/Action Alternative.

AB, AC Asbestos is the name for a group of naturally occurring silicate minerals. When serpentine rock is broken or crushed, asbestos may be released from the rock and may become airborne for long periods of time, causing a potential health hazard.

Therefore, without mitigation the Flyover Interchange Design Alternative and the Diamond Interchange Design Alternative may result in a significant impact to human health and the environment.

Mitigation 5.11-3 Exposure of Individuals to Asbestos Containing Dust

The following mitigation will assure that the proposed project will result is a *less* than significant impact.

(A) Implement Mitigation 5.5-2

Impact 5.11-4 Exposure of Individuals to Wildland Fires

AA No development will occur as a result of the No Project/Action Alternative.

Therefore, the No Project/Action Alternative is not expected to result in a significant impact to the environment.

AB, AC Wildland fires present a serious safety issue in the area. Construction of the Proposed Project may introduce potential sources for fire. During construction, equipment and vehicles may come in contact with wildland areas and accidentally spark and ignite vegetation. The use of power tools and acetylene torches may also increase the risk of fire hazard. This risk is similar to that found at other construction sites. Therefore, without mitigation the Flyover Interchange Design Alternative and the Diamond Interchange Design Alternative may result in a significant impact to human health and the environment.

Mitigation 5.11-4 Exposure of Individuals to Wildland Fires

The following mitigation will assure that the proposed project will result is a *less than significant impact*.

(A) The project applicant will ensure, through the enforcement of contractual obligations, that during construction, staging areas, welding areas, or areas

slated for development using spark-producing equipment shall be cleared of dried vegetation or other materials that could serve as fire fuel. To the extent feasible, the contractor shall keep these areas clear of combustible materials in order to maintain a firebreak. Any construction equipment that normally includes a spark arrester shall be equipped with an arrester in good working order. This includes, but is not limited to, vehicles, heavy equipment, and chainsaws.

Impact 5.11-5 Cumulative Impacts to Hazardous Materials

AA The No Project/Action Alternative will not contribute to cumulative Hazardous Materials impacts. *No impact* will result under the No Project/Action Alternative.

AB, AC There are no significant cumulative impacts related to hazardous materials. Therefore, the proposed interchange project will not add to cumulative impacts concerning hazardous materials. *Therefore, the proposed interchange project will not add to cumulative impacts concerning hazardous materials.*

Mitigation 5.11-5 Cumulative Impacts to Hazardous Materials

None required.